

5/7/98

**NOTES FROM 5/1/98 CRT PROJECT TEAM CONFERENCE CALL ON AIR,  
PACKAGING/LABELING, AND GLASS-TO-GLASS ISSUES****Attendees**

Joe Carpenter, NJ DEP  
David Isaacs, EIA  
David Lennett, Consultant to the Workgroup  
Jeff Lowry, Techneglas  
Charlotte Mooney, EPA OSW  
Rick Reibstein, MA OTA

Ron Stow, Lucent Technologies  
Chip Vitarelli, EPA OSW  
Greg Voorhees, Envirocycle  
Bruce Weir, ICF Kaiser  
Doug Wolf, NMELC

**SCHEDULE**

Charlotte Mooney presented a revised schedule based on the Office of ReInvention's suggestion that the CRT recommendation could be presented to the CSIC Council through a background piece in notebooks that are to be sent out May 4th and the final language at the June 9 Council meeting. Based on feelings that the recommendation should probably go to the Council before the meeting, Charlotte agreed to query the OI on whether the final recommendation should be presented to the Council prior to the meeting and how that could be done.

The group scheduled additional conference calls for:

Friday May 15, 2 - 4 pm EDT

Monday May 18, 10 -12 am EDT

June 3, 2 - 3 pm, EDT

**AIR ISSUES**

Charlotte Mooney started off the conversation by explaining the RCRA air emissions controls that would apply to a permitted RCRA facility. In general, there are three sets of provisions that apply to RCRA tanks and containers (storage/treatment units and recycling units) at permitted facilities (and at generators' sites), but none would apply to CRT processing because they only apply to management of certain organic or volatile organic wastes. Jeff Lowry confirmed that solutions used to clean coatings from glass would not likely be organic formulations.

Bruce Weir, ICF Kaiser, summarized and discussed how the various air statutes cover lead and particulate emissions, and how these programs might apply to a CRT glass recycler.

## Relevant Air Programs<sup>1</sup>:

Clean Air Act of 1970 -- National Ambient Air Quality Standards (NAAQS) for criteria pollutants including **lead** and **particulate**, implemented through state Statewide Implementation Programs (SIPs) approved by EPA. SIPs include different procedures for attainment and non-attainment areas, which are determined through monitoring networks.

Clean Air Act Amendments of 1990 -- EPA promulgates standards for emissions of Hazardous Air Pollutants (189+ chemicals) from specified source categories based on Maximum Achievable Control Technology (MACT). CRT glass recycling would not be included in any currently defined source categories, but could theoretically be added if EPA determined that to be appropriate.

**Bruce Weir agreed to look into what kinds of air permits or levels of emissions may be found at non-lead glass recycling facilities, if possible in a non-attainment area.**

The main message that I heard out of the conversation is that there are certainly programs under the Air Acts that address both lead and particulate, but that it is hard to know specifically how they would affect a particular processing facility.

**Charlotte Mooney proposed that we rely on the Air Acts and the provisions we have already developed (general release prevention provision (# 5), prevent releases of particulate provision (# 7), and prevent releases of cleaning sorting media (# 8) to address air emissions concerns. Charlotte asked that everyone consider this option in light of the conversation on air issues.**

## **PACKAGING/LABELING (interstate transportation issue)**

Charlotte Mooney noted that in a conversation with Norm Riley on packaging the issue came up of state-to-state variability that might occur if some states add CRTs to their Universal Waste rule before the CSI/CRT rule comes out. The result might be that some states have the Universal Waste approach in effect and some states have the CRT approach in effect. Since transportation is critical to successful glass-to-glass recycling, Charlotte suggested that the CSI/CRT rule packaging and labeling requirements (which are the only ones that apply during transportation) should specify that compliance is acceptable with either the CSI/CRT packaging and labeling requirements or, if the shipment originated in a Universal Waste state, that state's

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<sup>1</sup> Forgive any inaccuracies here, this is my very basic understanding based on what I gathered from the conversation which was much more in depth.

Universal Waste packaging and labeling requirements. This would allow shipments to move through both Universal Waste states and CSI/CRT states without encountering different (although very similar) standards. There was some concern that a state might have Universal Waste standards for CRTs that do not include packaging and/or labeling, although this seems unlikely given the way the Universal Waste rule is structured.

The group provisionally agreed with the general concept, and Charlotte agreed to draft something up for people to review. See attachment.

### **GLASS-TO-GLASS**

The issue under discussion is whether or how the streamlined regulatory system we are developing should be limited to glass-to-glass recycling. Charlotte Mooney proposed a short condition, and several suggested revisions were discussed, resulting in the following:

All TC hazardous glass that is technically and economically usable in CRT glass manufacturing is sent for use in CRT glass manufacturing, except that in all cases this must be 51% or more of the TC hazardous glass received by the processor."

Further discussion suggested that the condition should apply only to the processor, since collectors would have no way of knowing whether or not the condition is met.

The group agreed to consider this provision, and whether it should be applicable only to processors. Those with thoughts on the issue were to get back to Charlotte.

**ATTACHMENT: SUGGESTED PACKAGING/MARKING PROVISIONS  
TO ADDRESS INTERSTATE TRANSPORTATION ISSUE:**

**2. Identify materials in system -- marking:** *Materials must be marked in accordance with either (1) or (2) below.*

**(1) CSI/CRT approach:**

- (a) Whole TVs/monitors visible when looking at primary packaging (container or vehicle body): no marking required.
- (b) TVs/monitors, bare CRTs, and glass in packages (i.e., containers or vehicle bodies) or storage areas: mark container or storage area with the following words: "Cathode ray tubes (CRT) or CRT glass to be used in CRT glass manufacturing. Contains lead. Do not mix with other glass or materials."

**(2) Universal Waste approach for materials in transportation:** *If the state in which the shipment originated has Universal Waste marking standards (i.e., labeling with text) for the material: mark (label) the material as required under the originating state's Universal Waste program.*

**14. General packaging standard:** *Materials must be packaged in accordance with either (1) or (2) below.*

**(1) CSI/CRT approach:**

- (a) Package TVs, monitors, or whole CRTs in a way that minimizes breakage during normal shipping conditions. The packaging must minimize releases to the environment if unintentional breakage does occur. For example, if TVs and monitors are shrink wrapped onto pallets in such way that broken pieces of glass might not be contained, the material should be placed in an outside package (e.g., a box or a vehicle body) that will minimize releases.
- b) Package broken TVs/monitors/CRTs, CRT glass pieces, or CRT glass cullet in siftproof<sup>2</sup> packaging (i.e., a container or vehicle) that is constructed, filled, and closed so that:
  - (i) There will be no identifiable releases of CRT glass to the environment, and
  - (ii) The effectiveness of the package will not be reduced during normal shipping conditions. For example, packages should be resistant to puncture by glass pieces.

**(2) Universal Waste approach for materials in transportation:** *If the state in which the shipment originated has Universal Waste packaging standards for the material: package the material as required under the originating state's Universal Waste program.*

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<sup>2</sup> 'Siftproof' packaging means packaging impermeable to dry contents, including fine solid material produced during transportation, or packaging that prevents particles from being released from the package.